No. 200400063

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'NP2263'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of Washington, D.C. this twenty-ninth day of April, in the year two thousand and eight.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Syngenta Seeds, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME

3. VARIETY NAME
NP2263

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
P.O. Box 959
Minneapolis, MN 55440

5. TELEPHONE *(include area code)*
(763) 593-7333

6. FAX *(include area code)*
(763) 593-7828

FOR OFFICIAL USE ONLY

PVPO NUMBER
20040063

FILING DATE
January 21, 2004

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
DE

9. DATE OF INCORPORATION
September 24, 1976

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Ms. Dana S. Rewoldt
Syngenta Seeds Inc.
2369 330th Street, P.O. Box 500
Slater IA 50244

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 3652.00
DATE 1/21/04

CERTIFICATION FEE:
$ 768.00
DATE 3/11/08

JMS 4/27/07

11. TELEPHONE *(Include area code)*
515-685-5201

12. FAX *(Include area code)*
515-865-5072

13. E-MAIL
dana.rewoldt@syngenta.com

14. CROP KIND *(Common Name)*
Corn (dent)

16. FAMILY NAME *(Botanical)*
Gramineae

15. GENUS AND SPECIES NAME OF CROP
Zea mays L.

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☑ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? *(OPTIONAL)*
☐ YES ☑ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
(Follow instructions on reverse)

a. ☑ Exhibit A. Origin and Breeding History of the Variety
b. ☑ Exhibit B. Statement of Distinctness
c. ☑ Exhibit C. Objective Description of Variety
d. ☑ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☑ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☑ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☑ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☐ YES *(If "yes", answer items 21 and 22 below)* ☑ NO *(If "no", go to item 23)*

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☐ YES ☐ NO
IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☑ YES ☐ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☑ YES ☐ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Ronald S. Ferriss			
NAME *(Please print or type)*		NAME *(Please print or type)*	
Ronald S. Ferriss, Ph. D.		Ronald S. Ferriss, Ph. D.	
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Director, Strategy Facilitation	01/09/2004	Director, Strategy Facilitation	01/09/2004

(See reverse for instructions and information collection burden statement)

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INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $3,652 ($432 filing fee and $3,220 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

20. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

23. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

24. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

Released in a hybrid, 1-22-2003, offered for sale in the U.S.A. and Canada

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NP911 has been issued a PVP Certificate, 1992, #9200012

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

Syngenta Seeds, Inc.
NP2263
Exhibit A

Origin and Breeding History of Corn Inbred Line NP2263

The corn inbred NP2263 was derived from the initial cross of inbred line [redacted]911and inbred line NP903. Inbred Line [redacted]911 was developed by self-pollination in Pioneer Brand commercial F1 hybrid 3737. Inbred line NP903 was developed by self-pollination in the Pioneer Brand commercial F1 hybrid 3906.

JWS 9/28/07

After the initial cross of [redacted]911 and NP903, the breeding method was simple pedigree ear-to-row for the development of inbred line NP2263.

The initial self-pollination of the S0 source was made at Stanton, MN in the Northrup King Company nursery during the summer of 1990. This was followed by self-pollinating and pedigree selection at Stanton, MN and Kekaha, Kauai, Hawaii from 1991 through 1997.

The chronology of inbreeding is given below;

1991 Stanton, MN	Backcross the F_1 of [redacted]911 and NP903 to [redacted]911 to produce S_0 population.
1991 Kekaha, Kauai	S_0 population self-pollinated to create S_1 ears.
1992 Stanton, MN	S_1 self-pollinated to produce S_2 ears.
1993 Stanton, MN	Selected S_2 ears self-pollinated to produce S_3 ears.
1994 Stanton, MN	Selected S_3 ear rows self-pollinated to produce S_4 ears.
1994 Kekaha, Kauai	Selected S_4 ear rows self-pollinated to produce S_5 ears.
1995 Stanton, MN	Selected S_5 ear rows self-pollinated to produce S_6 ears.
1995 Kekaha, Kauai	Selected S_6 ear rows self-pollinated to produce S_7 ears.
1996 Stanton, MN	Selected S_7 ear rows self-pollinated to produce S_8 ears.
1997 Stanton, MN	Selected S_8 ear rows self-pollinated and ear rows bulked to produce Breeder Seed.

Selection criteria used during the inbreeding process included synchronous male and female flowering, plant health, ear fill, pre-harvest intactness and resistance to various stalk rots. Plants within each generation were also closely evaluated for uniformity of anther and silk color and plant and ear height. Selection was also done for specific combining ability for yield in hybrid combinations across several inbreds.

From 1997 to the present, the inbred line has been observed in London, Ontario, Canada; Stanton, MN; Janesville, WI and other locations. No phenotypic or isozymic variants have been observed. NP2263 is a uniform and stable inbred (from 1997 to 2003 during at least 5 generations of propagation).

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Syngenta Seeds, Inc.
NP2263
Exhibit B

Distinctness of Corn Inbred Line NP2263

The corn inbred line NP2263 (seed source 2321140) is most similar to the PVP Standard Inbred Line A619 (seed source DY990012). Comparisons of the two varieties were conducted in "side-by-side" trials in 2002 in Stanton, MN (2 plantings) and Janesville, WI (2 plantings) and trials in 2003 in Stanton, MN (2 plantings), Janesville, WI (2 plantings) and London Ont., Canada (1 planting). The trials were planted with two replications at each site. Plot size included 2 rows for each variety and measured 152 cm x 518 cm. Each plot had approximately 70 plants.

For plant level traits, we sampled 5 representative plants from the 2 rows of the 2 row plot at each location/environment and calculated an average for the plot. For plot level traits we evaluated the 2 row plot and gave an average score for the plot within that location/environment.

NP2263 differs from A619 for several different traits. These traits are:

The NP2263 leaf color is darker than the A619 leaf. The NP2263 leaf is a dark green (03 or 5GY 3/4) and the A619 leaf is medium green (02 or 5GY 4/4).

The anther color of NP2263 is purple (17 or 5RP 3/6) and A619 is green-yellow (05 or 2.5GY 8/6).

The cob color of NP2263 is red (14 or 5R 4/10) and A619 is white (19 or 2.5Y 8/2).

NP2263 is a distinct and unique inbred line.

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FORM -SD-470-28
(9-1-92)

EXHIBIT C
(Corn; Maize)

United States Department of Agriculture, Agricultural Marketing Service
Science Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
CORN (Zea mays L.)

Name of Applicant(s)	Variety Seed Source	Variety Name or Temporary Designation
Syngenta Seeds, Inc.	2321140	NP2263
Address (Street & No., or R.F.D. No.. City, State, Zip Code and Country) P.O. Box 959, Minneapolis, MN 55440 USA		FOR OFFICIAL USE PVPO Number 200400063

Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for and adequate variety description and must be completed.

COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices: describe #25 and #26 in comment section):

01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff
02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan
03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown
04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze
05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)
				26=Other (Describe)

STANDARD INBRED CHOICES(Use the most similar(in background and maturity)of these to make comparisons based on grow-out trial data):

Yellow Dent Families:

Family	Members
B14	CM105, A632, B64, B68
B37	B37, B76, H84
B73	N192, A679, B73, NC268
C103	Mo17, Va102, Va35, A682
Oh43	A619, MS71, H99, Va26
WF9	W64A, A554, A654, Pa91

Yellow Dent (Unrelated): Co109, ND246, Oh7, T232
W117, W153R
W182BN

White Dent: CI66, H105, Ky228

Sweet Corn: C13, Iowa5125, P39, 2132

Popcorn: SG1533, 4722, HP301, HP7211

Pipecorn: Mo15W, Mo16W, Mo24W

1. TYPE: (describe intermediate types in Comments section)

2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn

Standard Inbred Name A619

2. REGION WHERE DEVELOPED IN THE U.S.A.:

2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other

Standard Seed Source DY990012

3. MATURITY (In Region Best Adaptability; show Heat Unit formula in "Comments" section):

DAYS	HEAT UNITS		DAYS	HEAT UNITS
72	1267.2	From emergence to 50% of plants in silk	71	1261.8
70	1242.5	From emergence to 50% of plants in pollen	69	1214.3
004	108.9	From 10% to 90% pollen shed	004	101.4
NA	NA	From 50% silk to optimum edible quality	NA	NA
NA	NA	From 50% silk to harvest at 25% moisture	NA	NA

4. PLANT:

		Standard Deviation	Sample Size		Standard Deviation	Sample Size
179.4	cm Plant Height (to tassel tip)	5.6	45	190.9	13.5	45
54.5	cm Ear Height (to base of top ear node)	7.2	45	46.9	2.1	45
11.8	cm Length of Top Ear Internode	1.8	45	13.8	0.8	45
0.1	Average Number of Tillers	0.2	45	0.1	0.2	45
2.0	Average Number of Ears per Stalk	0.4	45	1.0	0.0	45
4	Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark			2		

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5. LEAF:		Standard Deviation	Sample Size		Standard Deviation	Sample Size
008.3	cm Width of Ear Node Leaf	0.8	45	009.1	0.4	45
077.9	cm Length of Ear Node Leaf	8.0	45	071.6	7.4	45
005	Number of leaves above top ear	0.8	45	005	0.2	45
041	degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	20.3	45	040	18.0	45
03	Leaf Color (Munsell code 5GY 3/4)			02	(Munsell code 5GY 4/4)	
4	Leaf Sheath Pubescence (Rate on scale from1+none to 9=like peach fuzz)			2		
5	Marginal Waves (Rate on scale from 1=none to 9=many)			6		
4	Longitudinal Creases (Rate on scale from 1=none to 9=many)			5		
6. TASSEL:						
09	Number of Primary Lateral Branches	0.9	45	09	1.7	45
049	Branch Angle from Central Spike	20.6	45	044	16.9	45
41.8	Cm Tassel Length (from top leaf collar to tassel tip)	2.5	45	42.4	6.2	45
7	Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			7		
17	Anther Color (Munsell code 5RP 3/6)			05	(Munsell code 2.5GY 8/6)	
26	Glume Color (Munsell code 5GY 7/6) see comments			05	(Munsell code 5GY 7/6)	
2	Bar Glumes (Glume Bands): 1=Absent 2=Present			2		
7a. EAR (Unhusked Data):						
26	Silk Color (3 days after emergence) (Munsell code 2.5GY 8/8) see comments			05	(Munsell code 2.5GY 8/8)	
05	Fresh Husk Color(25 days after 50% silking) (Munsell code 5GY 7/6)			05	(Munsell code 5GY 7/6)	
22	Dry Husk Color (65 days after 50 % silking) (Munsell code 2.5Y 8/4)			22	(Munsell code 2.5Y 8/4)	
2	Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			1		
6	Husk Tightness (Rate on scale from1=very loose to 9=very tight)			6		
1	Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8cm) 3=Long (8-10 cm beyond ear tip) 4=Very long (>10 cm)			2		
7b. EAR (Husked Ear Data):		Standard Deviation	Sample Size		Standard Deviation	Sample Size
13.1	cm Ear Length	1.4	45	15.2	1.9	45
36.2	mm Ear Diameter at mid-point	2.6	45	44.0	2.4	45
82.5	gm Ear Weight	15.5	45	122.3	23.7	45
14	Number of Kernel Rows	0.5	45	14	0.4	45
2	Kernel Rows: 1=Indistinct 2=Distinct			2		
2	Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			2		
13.6	cm Shank Length	2.8	45	10.8	0.7	40
2	Ear Taper: 1=Slight 2=Average 3=Extreme			2		
	Application Variety Data				Standard Inbred Data	
	Note: Use chart on first page to choose color codes for color traits					

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8. KERNEL (Dried):		Standard Deviation	Sample Size		Standard Deviation	Sample Size
09.7	mm Kernel Length	0.4	45	10.7	0.7	45
07.7	mm Kernel Width	0.3	45	08.8	0.6	45
04.5	mm Kernel Thickness	0.5	45	03.7	0.7	45
42.1	% Round Kernels (Shape Grade)	10.2	45	30.3	24.8	45
1	Aleurone Color Pattern: 1=Homozygous 2=Segregating			1		
19	Aleurone Color (Munsell code 2.5Y 8/6)			19	(Munsell code 2.5Y 8/6)	
07	Hard Endosperm Color (Munsell code 2.5Y 8/10)			06	(Munsell code 2.5Y 8/8)	
3	Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other			3		
25.8	gm Weight per 100 Kernels (unsized sample)	1.9	45	28.6	2.8	45
9. COB		Standard Deviation	Sample Size		Standard Deviation	Sample Size
23.2	mm Cob Diameter at mid-point	2.9	45	26.5	2.6	45
14	Cob Color (Munsell code 5R 4/10)			19	(Munsell code 2.5Y 8/2)	

10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant): leave blank if not tested: leave Race or Strain Options blank if polygenic):		
A. Leaf Blights, Wilts, and Local Infection Diseases		
	Anthracnose Leaf Blight (*Colletotrichum graminicola*)	
	Common Rust (*Puccinia sorghi*)	
	Common Smut (*Ustilago maydis*)	
8	Eyespot (*Kabatiella zeae*)	7
	Goss's Wilt (*Clavibacter michiganense* spp. *Nebraskense*)	
	Gray Leaf Spot (*Cerscopora zeae-maydis*)	
6	Helminthosporium Leaf Spot (*Bipolaris zeicole*) Race 3	6 Race 3
6	Northern Leaf Blight (*Exserohilum turcicum*) Race Mixed	6 Race Mixed
	Southern Leaf Blight (*Bipolaris maydis*) Race	Race
	Southern Rust (*Puccinia polysora*)	
	Stewart's Wilt (*Erwinia stewartii*)	
	Other (Specify)	
B. Systemic Diseases		
	Corn Lethal Necrosis (MCMV and MDMV)	
	Head Smut (*Sphacelotheca reiliana*)	
	Maize Chlorotic Dwarf Virus (MCDV)	
	Maize Chlorotic Mottle Virus (MCMV)	
	Maize Dwarf Mosiac Virus (MDMV) Strain	Strain
	Sorgham Downy Mildew of Corn (*Peronosclerospora soghi*)	
	Other (Specify)	
C. Stalk Rots		
	Anthracnose Stalk Rot (*Colletotrichum graminicola*)	
	Diplodia Stalk Rot (*Stenocarpella maydis*)	
	Fusarium Stalk Rot (*Fusarium moniliforme*)	
	Gibberella Stalk Rot (*Gibberella zeae*)	
	Other (Specify)	
Ear and Kernel Rots		
	Aspergillus Ear and Kernel Rot (*Aspergillus flavus*)	
	Diplodia Ear Rot (*Stenocarpella maydis*)	
	Fusarium Ear and Kernel Rot (*Fusarium moniliforme*)	
	Gibberella Ear Rot (*Gibberella zeae*)	
	Other (Specify)	

Application Variety Data	Standard Inbred Data
Note: Use chart on first page to choose color codes for color traits	

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Applicant Variety Data NP2263	Page 4	Standard Inbred Data A619
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant): leave blank if not tested:		
Banks Grass Mite (*Oligonychus pratensis*)	Standard Deviation / Sample Size	Standard Deviation / Sample Size
Corn Earworm		
Leaf-Feeding		
Silk-Feeding:		
mg larval wt.		
Ear Damage		
Corn Leaf Aphid (*Rhopalosiphum maidis*)		
Corn Sap Beetle (*Carpophilus dimidiatus*)		
European Corn Borer (*Osstrinia nubilalis*)		
6 1st Generation (Typically Whorl Leaf Feeding)		5
2nd Generation (Typically Leaf Sheath-Collar feeding)		
Stalk Tunneling:		
cm tunneled /plant		
Fall Armyworm		
Leaf-Feeding		
Silk-Feeding:		
mg larval wt.		
Maize Weevil (*Sitophilus zeamaize*)		
Northern Rootworm (*Diabrotica barberi*)		
Southern Rootworm (*Diabrotica undecimpunctata*)		
Southwestern Corn Borer (*Diatraea grandiosella*)		
Leaf-Feeding		
Stalk Tunneling:		
cm tunneled/plant		
Twospotted Spider Mite (*Tetranychus urticae*)		
Western Rootworm (*Diabrotica virgifera virgifera*)		
12. AGRONOMIC TRAITS:		
NA Stay Green (at 65 days after anthesis) (rate on scale from 1=worst to 9=excellent.)		NA
1 % Dropped Ears (at 65 days after anthesis)		1
0 % Pre-anthesis Brittle snapping		0
0 % Pre-anthesis Root Lodging		2
0 % Post-anthesis Root Lodging (at 65 days after anthesis)		1
1962.1 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)		2061.0

13. MOLECULAR MARKERS: (0=data unavailable: 1 data available but not supplied: 2=data supplied)

1 Isozymes 2 RFLP's RAPD's

NP2263

REFERENCES:

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Emerson, R. A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180

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Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp.

Sprague, G.F., and J.W. Dudley (Editors). 1988 Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, SCCA, SSSA, Madison, WI.

Stringfield, G.H, Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959

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NP2263
COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and /or where data was collected. Continue in Exhibit D):

1) Heat Units per day were calculated using the standard formula: HU={MaxTemp (86) + Min Temp (50)]/2-50.
2) Data for this exhibit was collected at London, Ontario, Canada, Stanton, MN and Janesville, WI.
3) Large standard deviations are probably due to environmental factors at each individual location where the variety was observed. Since the varieties reported in this exhibit are inbreds, the response to the environment is probably more pronounced than a hybrid or a combination of these inbred lines. Any stress at specific times during the growing season could influence results.
4) * - There is a slight pale purple shading of the silk ends on A619 with age.
5) Disease and Insect information for both inbred lines was collected at Stanton, MN in 2002.
6) Glume color of NP2263 is green-yellow (05) with dark purple shading (17).
7) Silk color of NP2263 is green-yellow (05) with pale purple shading (16).

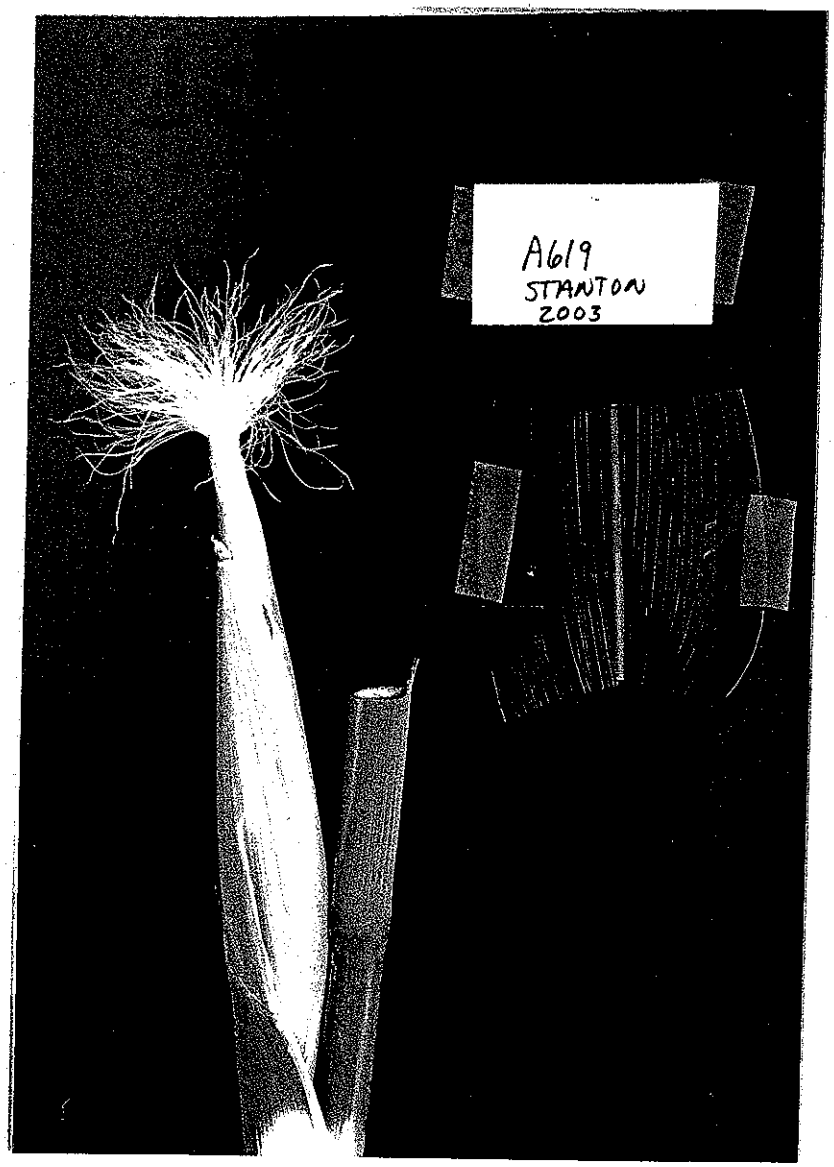
The environments had different planting dates and were in different fields; these contribute to the variability of the traits.

The London trial location may be causing the standard deviations for these plants to be a bit wider than normal for a couple of reasons. The planting dates for the London trials were substantially later than the dates for the Stanton planting. London is in an area that plants 83-90 day corn and Stanton and Janesville are locations that plant 94-102 day corn. In addition to the relative maturity difference between the locations, the delayed plantings due to the weather conditions in London provide even less time for the plants to mature.

London normally plants in the May 5- May 10 range. But in both years the actual planting dates were substantially later than this date. The environment in 2003 was hotter than normal. To the extent that London trial resorted to nursery irrigation to attempt to avoid moisture stress at flowering time.

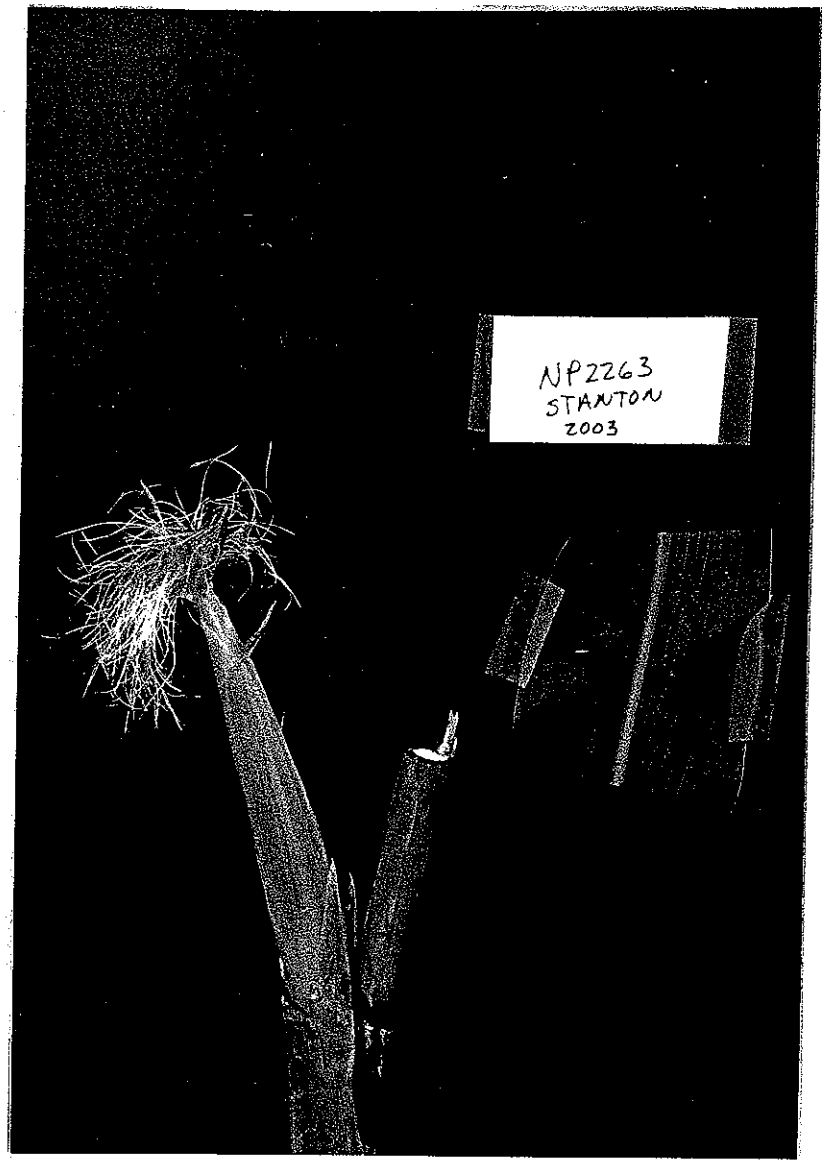
JMS 9/28/07

Additional Description of the Corn Inbred Line NP2263
Table 1



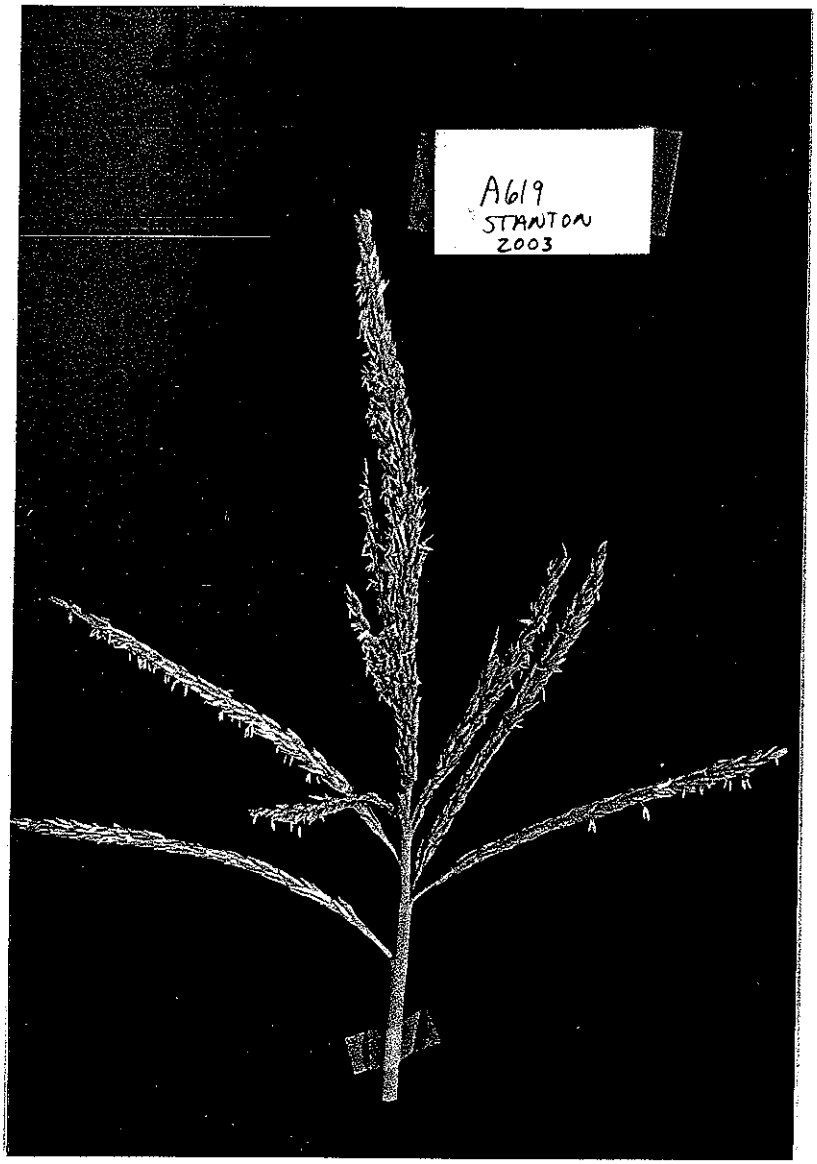
Typical A619 Silk and Second Leaf Color

Additional Description of the Corn Inbred Line NP2263
Table 1 (continued)



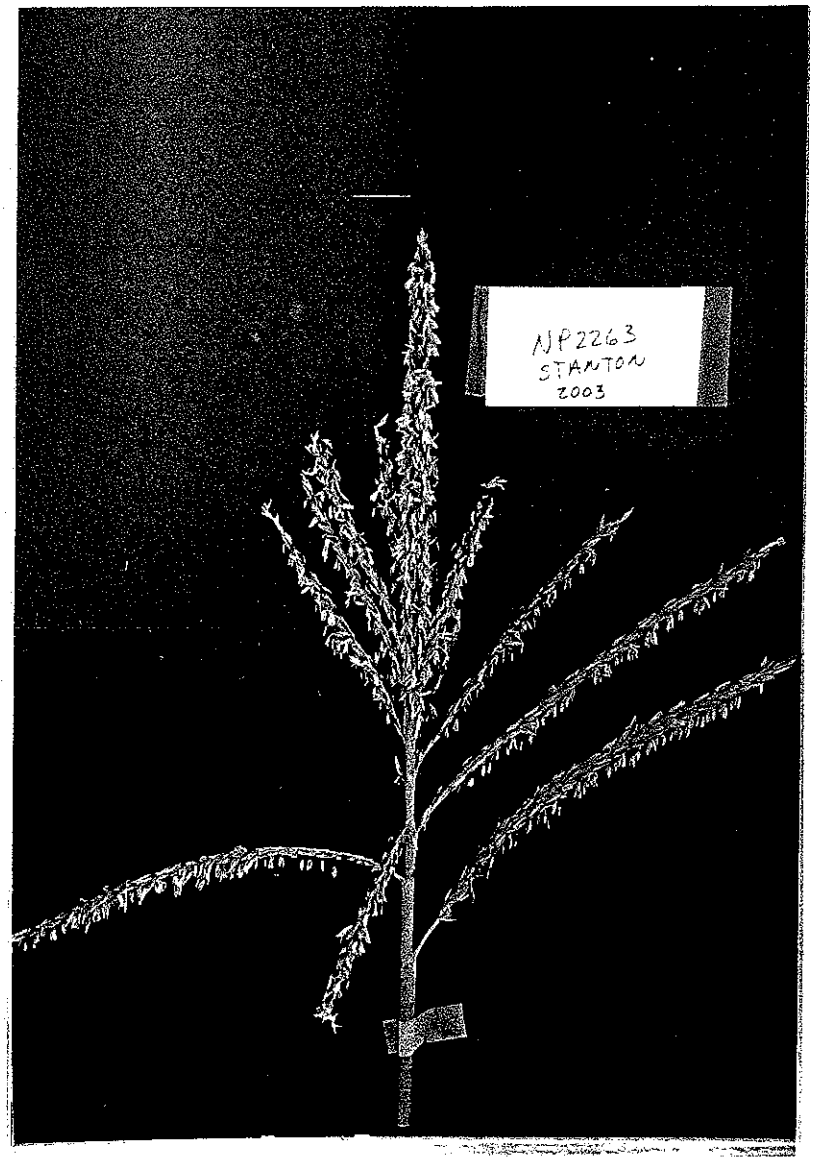
Typical NP2263 Silk and Second Leaf Color

Additional Description of the Corn Inbred Line NP2263
Table 2



Typical A619 Tassel

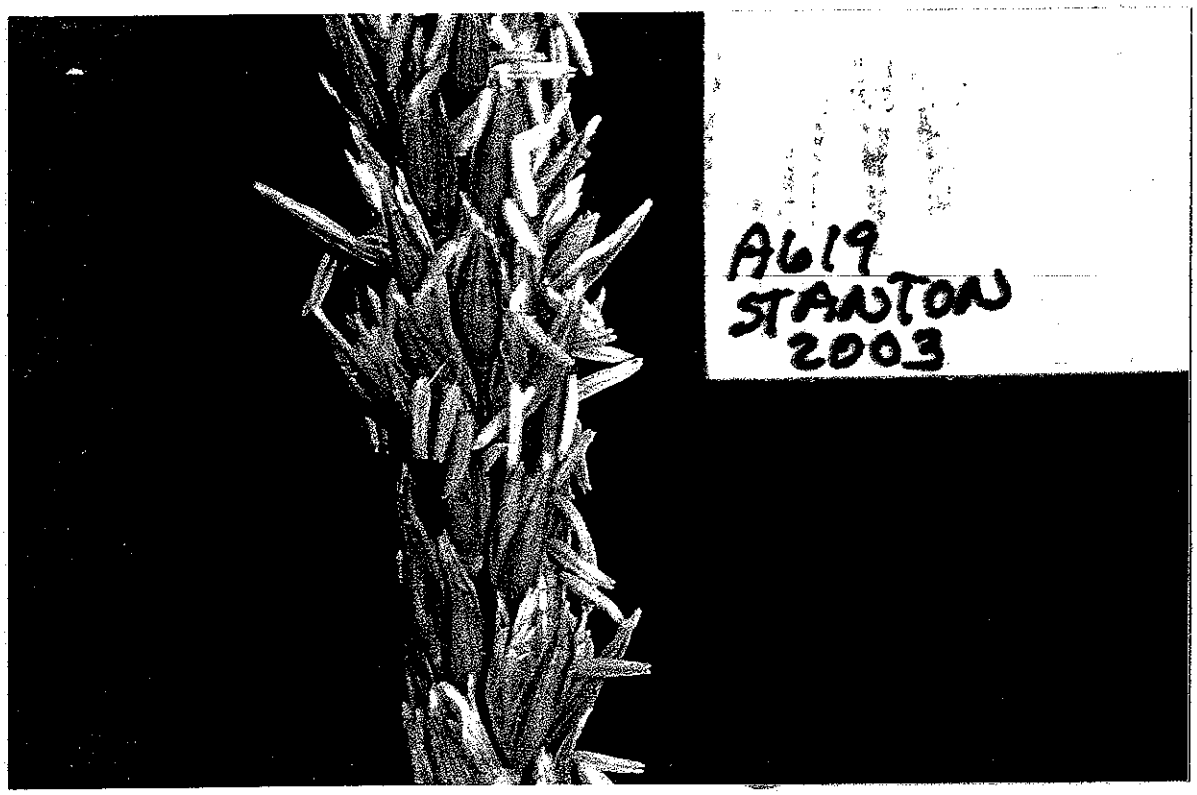
Additional Description of the Corn Inbred Line NP2263
Table 2 (continued)



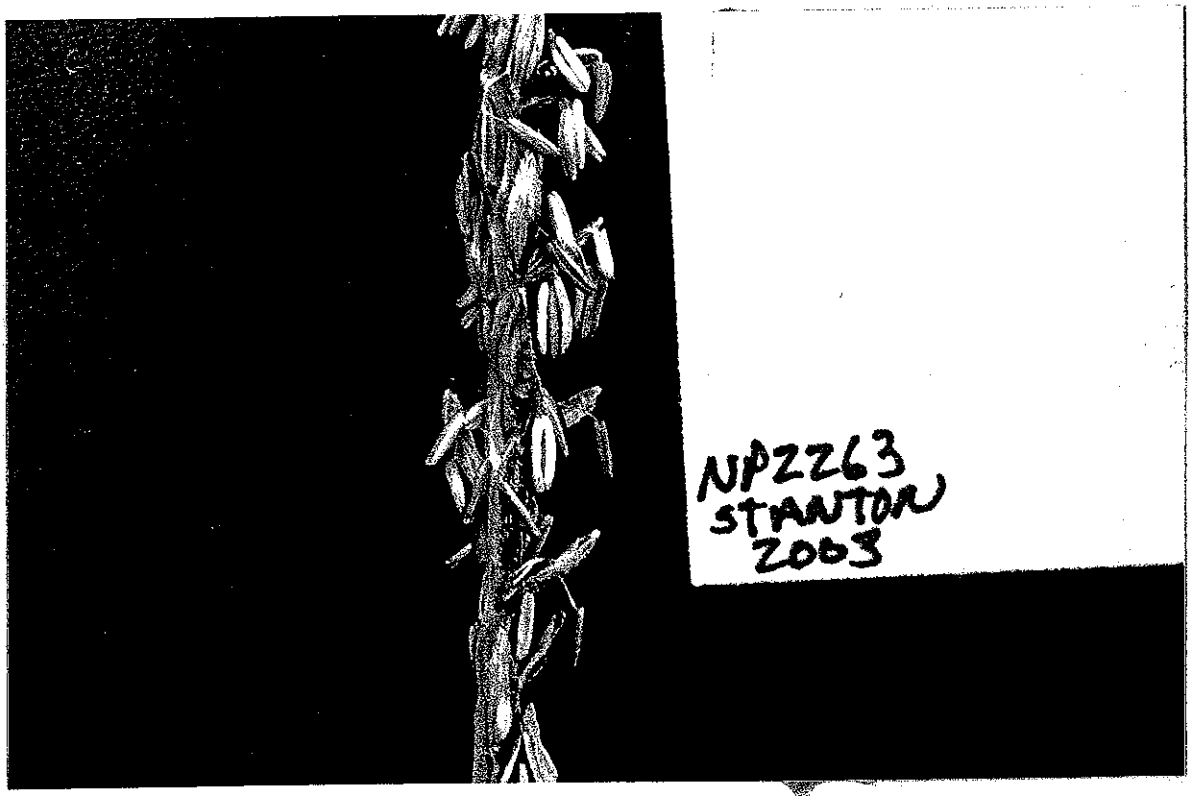
Typical NP2263 Tassel

EXHIBIT D

Additional Description of the Corn Inbred Line NP2263
Table 3



Anther and Glume Color of A619



Anther and Glume Color of NP2263

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Syngenta Seeds, Inc.		NP2263
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
P.O. Box 959 Minneapolis, MN 55440	(763) 593-7333	(763) 593-7828
	7. PVPO NUMBER 200400063	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ **YES** ☐ **NO**

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ **YES** ☐ **NO**

10. Is the applicant the original owner? ☑ **YES** ☐ **NO** **If no, please answer <u>one</u> of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☐ **YES** ☐ **NO** **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☐ **YES** ☐ **NO** **If no, give name of country**

11. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

(See attached Exhibit E Addendum)

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

Syngenta Seeds, Inc.
NP2263
Exhibit E, Block #11

Additional Explanation on Ownership

Syngenta breeder, Christopher Perry, developed inbred NP2263, working primarily from Stanton, MN (see Exhibit A for detail). Perry was a breeder for Northrup King Company at the beginning of the line's development, and was employed by Novartis Seeds, Inc. (formed by the merger of Ciba and Sandoz) at the completion of the lines development in 1999. This line is now exclusively owned by Syngenta Seeds, Inc. (formed by the merger of the agribusinesses of Novartis and Zeneca in 1999).